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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/352,659	07/06/1999	DAVID NORRIS	M-4808-3C-US	2554
22120	7590	04/08/2005	EXAMINER	
ZAGORIN O'BRIEN GRAHAM LLP 7600B N. CAPITAL OF TEXAS HWY. SUITE 350 AUSTIN, TX 78731			MEI, XU	
			ART UNIT	PAPER NUMBER
			2644	

DATE MAILED: 04/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/352,659	NORRIS ET AL.	
	Examiner Xu Mei	<b>Art Unit</b>	2644

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 06 July 1999.
- 2a) This action is FINAL.                            2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 8-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 8-25 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | Paper No(s)/Mail Date: _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>02/09/2000</u> . | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|   | 6) <input type="checkbox"/> Other: _____                                    |

***Claims Objections***

1. The numbering of claims is not in accordance with 37 CFR 1.126 which requires the original numbering of the claims to be preserved throughout the prosecution. When claims are canceled, the remaining claims must not be renumbered. When new claims are presented, they must be numbered consecutively beginning with the number next following the highest numbered claims previously presented (whether entered or not). Misnumbered claims 20-37 (Preliminary Amendment filed 07/06/1999) had been renumbered 8-25. The specification originally filed contains only claims 1-7, not claims 1-19 as indicated in the preliminary amendment.

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 8-25 are rejected under 35 U.S.C. 102(b) as being anticipated by Sakata et al. (US 5,166,464, hereafter, Sakata).

Considering claims 8-25, Sakata teach an electronic musical instrument or audio synthesizer having a reverberation which comprising a register means with a variety of parameters and such parameters are supplied from a ROM 102 and "transferred" or "programmed" directly and interactively (volume parameters being directed programmed into the different storage means) into variety of register array or means (Col. 4, line 37-Col. 5, line 38, and Figs. 1, 18-19), wherein control of the left and right volume parameters is by at least one of user-control or application program-control (pedal 110 or DSP 105, see also Col. 6, lines 15-39), multiple storage means (elements 102, 103) for storing left, right offset volume values (the left and right channel panning weighing parameters are inherently volume control parameters used for left and right volume balance control, see also Col. 6, lines 15-39), multiplication circuitry (elements 301, 302, 303) and a controller (DSP, element 105) for generating and controlling the left and right volume data (see Fig. 1-3 and their descriptions). Sakata further teach the player can freely "switch" or "select" (means for selecting different control modes) different value coefficient of the depth and width of the vibrato effect for the audio synthesizer (i.e., comparing different volume values for the synthesizer). The synthesizer is inherently in first (user-control/application

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program-control) mode when the volume values is being controlled by at least one of user-control or application program-control or it is in second (predefined/pre-stored volume offset value) mode which the volume data is predefined/pre-stored and stored in ROM 102 or RAM 103 when the synthesizer is not controlling by at least one of user-control or application program-control (see Figs. 6-8 and Col. 4, line 67-Col. 5, line 11, Fig. 4a and Col. 6, line 65-Col. 7, line 16).

Fig. 3 of Sakata shows "first" accumulator 304 and 305 which ultimately output data to the outputs of the synthesizer, while "second" accumulator 306 outputs data which is written into the vibrato delay memory 401 (Sakata Fig. 4a), which is addressed by the outfit shown in Sakata's Fig. 4b. The vibrato delay memory is inherently a "wavetable" (i.e., a semiconductor or like memory, this can read as first storage/memory location or second storage/memory location as claimed). Note that left and right channel panning weighting parameters (Col. 11, lines 12-60) are inherently volume control parameters (i.e., balance), and the means for generating them is a volume control means. And the audio synthesizer as shown in Figs. 2-3 is generally manufactured into monolithic IC or processor as claimed. And Fig. 2 of Sakata shows a control circuit for the synthesizer operation including various memories (203, 205 for example),

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serves as registers that hold parameters to control the operation of the synthesizer. The various registers as in Fig. 2 clearly can be considered as "register array". See Fig. 2 and Col. 4, line 37-Col. 6, line 10.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Xu Mei whose telephone number is 571-272-7523. The examiner can normally be reached on Monday-Friday (9:30-6:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sinh Tran can be reached on 571-272-7564. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Xu Mei  
Primary Examiner  
Art Unit 2644  
03/29/2005